

ABSTRACT

Disclosed is a regional tunnel management method in a mobile communication system using Mobile IP. A mobile node transmits a location registration request to a first GGSN (Gateway GPRS (General Packet Radio Service) Support Node), upon receiving information indicating that the first GGSN supports a foreign agent function and also receiving an Agent Advertisement message with an address of a second GGSN. The information and the Agent Advertisement message are transmitted by the first GGSN. The first GGSN transmits the location registration request to the second GGSN. The second GGSN registers an address of the first GGSN to which the mobile node belongs, and then transmits to a home agent the Location Information message indicating an address of the first GGSN to which the mobile node belongs.